



The
**Patent
Office**

WPIL - (C) Derwent Info. 1998

AN - 82-17113E [09]

XA - C82-E17113

TI - Diaphragm for electrolytic cell - has mat of amorphous ***silica*** or zirconium oxide ***fibres*** with fluorocarbon polymer binder

DC - A85 E36 J03 X25

PA - (ALKU) AKZO NV

NP - 1

NC - 001

PN - NL8003824 A 820201 DW8209

PR - 80NL-003824 800702

IC - C25B-013/04

AB - NL8003824 Diaphragm for electrolysis cell comprises a mat of inorganic ***fibres*** and a fluorohydrocarbon polymer binder. The mat is composed of amorphous SiO₂ or ArO₂ ***fibres*** and the pores of the bonded mat are filled with amorphous hydrated SiO₂ or ZrO₂ such that the diaphragm has a hydrodynamic permeability of less than 30. x 10 power-10 m³/N.sec. and an electrical resistance factor (= the ratio of the ohmic resistance of the electrolyte- saturated diaphragm to that of an electrolyte layer of the same thickness as the diaphragm) of less than 10. In a pref. diaphragm, the hydrodynamic permeability is less than 0.3 x 10 power-10 m³/N.sec. and the electrical resistance factor is less than 5.

The diaphragms have controlled permeability, good conductivity and good ion conductivity, good resistance to electrolytic media and good mechanical strength, and give reduced energy consumption in the cell.
(11pp)

MC - A04-E10 A12-E09 E31-P03 E35-L J03-B03 X25-R01C

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